

Focused CRMMP for the Carlsbad Energy Center Project; Limited Construction – CEMS Concrete Pad

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1.0 Introduction

This memorandum is intended to serve as a focused Cultural Resources Mitigation and Monitoring Plan (CRMMP) explaining how the Carlsbad Energy Center Project (CECP) will comply with and how the Cultural Resources Specialist (CRS) will implement the California Energy Commission's (CEC's) cultural resources Conditions of Certification (COCs) for the CECP construction of an approximately 20 foot by 20 foot concrete pad for the Continuous Emissions Monitoring System (CEMS) as the initial ground-disturbing activity.

CEC Staff has determined that the CECP would not have a significant impact on known significant archaeological resources, historic structures, or ethnographic resources. With the adoption and implementation of the proposed Conditions of Certification CUL-1 through CUL-8, the CECP would not have a significant impact on potentially significant archaeological resources that may be discovered during construction.

The focused CRMMP provides procedures to be followed in the attempt to reduce potential impacts of the proposed project on archaeological resources discovered during construction-related excavation activities to a less than significant-level. The measures that would be implemented would include the following:

- Instruction of workers to recognize cultural resources
- Specific measures to avoid or minimize impacts to cultural resources (flagging, monitoring, etc.)
- Prescribed actions to be taken in the event that unanticipated cultural materials are discovered during construction, or known resources are impacted in an unanticipated manner
- Treatment protocols for any cultural resources that may be exposed during project construction
- Treatment of any discovered human remains in accordance with state law

The CRMMP is prepared to fulfill CUL-3 of the CEC's cultural resources COCs, which are set forth in the Presiding Members Proposed Decision (PMPD) dated May 9, 2011, and the Errata to the PMPD dated June 15, 2011 and are attached as Appendix A to this CRMMP. The purpose of this focused CRMMP is to lay out a brief program of mitigation for direct

and indirect impacts to cultural resources during construction of a 20 foot x 20 foot concrete pad at the site. This activity is expected to last approximately two days.

This abbreviated CRMMP provides essential information for the identification, evaluation, treatment, and protection of any cultural resources that are affected by or may be discovered during the construction of the 20 foot x 20 foot concrete pad.

Cultural resources are defined as anything made or affected by human beings or the remains thereof, as well as human remains. For the purposes of this CRMMP, the terms “finds,” “cultural resource,” “cultural material,” “discovery,” and “cultural resource materials” are used interchangeably. Types of cultural resources will be consistent with California Code of Regulations, Title 14, Chapter 11.5, section 4852(a), including archaeological and historical objects, sites and districts, historic buildings and structures, cultural landscapes, and sites and resources of concern to local Native American or other ethnic groups.

The focused CRMMP includes the following:

- A brief project description
- A brief summary of known cultural resources in and immediately adjacent to the project or cultural resources that might be affected by the project
- A monitoring plan to be employed during construction of the concrete pad
- A description of all avoidance measures such as flagging or fencing and the timeframes during which these measures would be required to protect cultural resources
- A statement of recording procedures for newly discovered cultural resources
- A statement of policy for the collection, retention, and disposal of cultural materials and archaeological records
- A statement that all cultural materials retained will be prepared in accordance with the requirements of an identified, qualified curatorial facility and that the project owner will encumber all associated expenses for the curation of the materials at the San Bernardino County Museum, at 2024 Orange Tree Lane, Redlands, California (909-307-2669). A written agreement with Sonoma State is provided in Appendix B.
- A statement that the CRS has access to or ability to provide equipment and supplies necessary for mapping, photography, and recovery of any cultural resources that may be discovered
- Reporting requirements, if cultural materials are discovered

Any discussion, summary, or paraphrasing of the Conditions of Certification (COCs) in this CRMMP is intended as general guidance and as an aid to the user in understanding the COCs and their implementation. The COCs, as written in the PMPD and Errata to PMPD, shall supersede any summarization, description, or interpretation of the Conditions in the CRMMP. The Cultural Resources COCs, set forth in the PMPD and Errata to PMPD, are contained in Appendix A.

2.0 Overview of Project

The Application for Certification (AFC) for the CECF has been prepared by the Carlsbad Energy Center LLC (Applicant) in accordance with the California Energy Commission’s (CEC) Power Plant Site Certification Regulations (February 2007).

The CECP project is located on approximately 23 acres of the existing Encina Power Station in the City of Carlsbad. The Applicant is proposing to develop the CECP to meet the electrical resource needs identified by San Diego Gas and Electric (SDG&E). This includes contributing to electricity reserves that will ensure a reliable energy supply and local and regional electrical transmission grid support in San Diego County and the southern California region.

The AFC has been prepared in accordance with CEC guidelines and provides:

- A detailed description of the CECP.
- An assessment of the project's likely impact on the existing environment.
- Measures proposed by the Applicant to mitigate potential project impacts to ensure that environmental issues are properly and responsibly addressed.
- A discussion of compliance with applicable laws, ordinances, regulations, and standards (LORS).

The Applicant proposes to develop a natural gas-fired generating facility in the City of Carlsbad in San Diego County (County), California. The CECP will be a fast-start high-efficiency, combined-cycle facility that will support San Diego Gas & Electric's local load and provide overall system reliability.

The CECP site is located in the City of Carlsbad, San Diego, California. The site address is 4600 Carlsbad Blvd, Carlsbad, California 92008. The CECP site is part of the 95-acre Encina Power Station located in Township 12 South, Range 4 West, Section 7, in San Diego County.

The project site is located in the central portion of the City of Carlsbad, adjacent to the Pacific Ocean and immediately west of I-5. Carlsbad Boulevard (also designated as County Highway S21) is located west of the project site and the Agua Hendionda Lagoon is located adjacent to the site to the north. An existing railroad line is adjacent to the site to the west. The predominant uses in the vicinity are mainly industrial, with residential and commercial uses located nearby.

3.0 Cultural Resources Assessment

On July 10, 2007, archaeologist Clint Helton of CH2M HILL conducted a cultural resources survey on behalf of the proposed CECP of portions of the site that were accessible (not covered by structures) using 10-meter parallel transects. This survey encompassed the CECP site, the laydown areas, and the off-site reclaimed water line alignment. The CECP would be located entirely within the existing Encina Power Station property, which was constructed in the early 1950s. Previous geotechnical evaluations within the Encina Power Station boundaries, but not within the actual project location, verified the presence of fill to a depth of 3 to 9 feet (CECP 2007a, p. 5.3-14 and CH2MHill 2007a, p. 15).

Mr. Helton surveyed up to a 200-foot buffer around the project area, stopping at the ATSF/BNSF railroad right-of-way. In addition, a 50-foot buffer on the east side of the railroad following the reclaimed water line alignment south to Cannon Road was surveyed. Ground visibility during the survey was good and the area had been heavily graveled and graded. No prehistoric resources were observed as a result of the survey (CECP 2007a, Confidential Report, p. 3).

On October 1, 2008, CH2M HILL conducted a pedestrian survey of the proposed 230 kV switchyard site and 230 kV transmission interconnection route. The survey area included a 200 foot buffer around the proposed switchyard and transmission interconnection route. The proposed switchyard site would be located within an existing SDG&E parcel of land that includes the existing Cannon Substation. The proposed site has been previously graded and some areas have been leveled and other have been filled and the proposed transmission interconnection route has also been previously disturbed (SR 2008q, Technical Memorandum, p. 1).

JRP conducted an architectural field survey to assess the potential for historic architectural resources at the proposed project location. JRP examined the Encina Power Station, including the CECP site and adjacent parcels no less than one parcel from the plant boundaries (CECP 2007a, p. 5.3-15). The architectural study area considered the location of tanks 5, 6, and 7 where the proposed CECP project would be constructed after tank removal, the Cannon Substation, and a segment of the former Atchison, Topeka and Santa Fe Railway's "Surflines," now owned by North San Diego County Transit District (CECP 2007a, p. 5.3-15).

The results of the architectural survey indicated that the study area is primarily industrial, but that a modern hotel, restaurant, and gas station complex is located immediately to the south. In addition, agricultural fields are located east of the freeway, and a modern residential area is located south of Cannon Road, outside the study area (CECP 2007, p. 5.3-15).

3.1 Results: Prehistoric and Historic Archaeological Resources Identified and Evaluated for Historical Significance

The archival research as well as archaeological field surveys failed to locate or reestablish the presence of any significant archaeological sites or areas of heritage concern or areas of religious significance within the CECP project boundaries or survey area. Three archaeological sites are located near the CECP site, the presence of one site that would fall within the project footprint, could not be reconfirmed. All others fall outside the project footprint. In summary, there are 35 previously recorded cultural resources within one mile of the project. All but two of these previously recorded resources are prehistoric sites or isolates (CECP 2007a, p. 5.3-13).

Nevertheless, while significant archaeological and historical sites were not discovered during the field surveys for the CECP, since numerous archaeological sites were previously recorded nearby, it is possible that subsurface construction could encounter buried archaeological deposits. As such, the CECP proposes measures to mitigate any potential adverse impacts that could occur due to any inadvertent discoveries of buried cultural resources. For example, the CECP has proposed environmental sensitivity training for workers and monitoring for disturbances in native soil.

3.2 Historic Structures Identified and Evaluated for Historical Significance

The applicant identified three historic structures within the project area from the records search and the field survey. The structure identified and recorded via the field survey is the Atchison, Topeka and Santa Fe Railway's Surflin. It is a length of rail line that runs through the Encina Power Station west of the CECP. This rail line is part of the former Atchison, Topeka and Santa Fe Railway's Surflin, now owned by North San Diego County Transit District. The track was originally built in 1882, but realigned in 1906 and is now used as a commuter and freight line. JRP evaluated this segment of the rail line on behalf of CECP. According to CEPC, this resource does not appear to meet the criteria for listing in the NRHP, CRHR, or the San Diego County Register of Historical Resources as it lacks integrity of design, setting, materials, workmanship, feeling, and association for the potential period of significance of 1882. Moreover, continued development along the route has impacted the integrity of the line; as such, little remains of the 1882 track except the location (CECP 2007a, Appendix 5.3B, p. 19).

The Carlsbad Santa Fe Depot was built in 1887 by the Arizona Eastern Railway, burned and was rebuilt in 1907, and is listed on the National Register of Historic Places (NRHP). The Depot is located at 400 Elm Avenue (now 400 Carlsbad Village Drive) and was constructed in the Gothic Revival Style of wood, weatherboard, and shingles. The Depot now serves as a visitor's center (Carlsbad 2008), (Santa Fe 2008).

4.0 Pre-construction Phase Tasks

Pre-construction phase tasks include monitoring during geotechnical drilling, designating and obtaining approval of a CRS, approving the qualifications of Construction Monitors, submitting and obtaining CEC approval for a project CRMMP, and preparing and obtaining approval of the Worker Environmental Awareness Program (WEAP). A WEAP template training record is provided in Appendix B.

5.0 Construction Phase Tasks

Construction phase tasks include providing onsite employee cultural resources awareness training to all new employees during their first week of employment, keeping current with the project schedule, and monitoring for cultural resources during construction of the concrete pad, as well as evaluating any cultural resources discovered during construction and mitigating any cultural resources, if avoidance is not possible. Additional construction phase tasks include notifying the CPM within 24 hours of any discoveries not subject to prescriptive treatment; and maintaining daily logs and monthly compliance reports of all cultural resources monitoring and mitigation activities at the project site.

6.0 Post-construction Phase Tasks

Post-construction phase tasks include completing a report of monitoring for geotechnical drilling per CUL-6.

7.0 Worker Environmental Awareness Training

A pre-construction meeting and training session will be provided to all employees at the initial start of construction, and to all new employees prior to, and during ground-disturbing activities, to brief them on the role and responsibility of the archaeologist and the procedures to follow in the event of a cultural resources discovery. The training session will include information on how to recognize cultural resources and the legal and/or regulatory implications of knowingly destroying cultural resources or removing artifacts, human remains, bottles and other cultural materials from the site. The training will be presented by the CRS, Cultural Resource Monitor (CRM), or another qualified individual approved by the CPM, may be combined with other training programs, and may be presented in the form of a video, with qualified staff available (via telephone or other means) to answer questions during or following the presentation(s).

All workers who complete the training will be required to sign a form certifying they understand the content of the training and will abide by its guidelines. Additionally, documentation will be provided to the CPM of the cultural resources awareness training of all new employees.

8.0 Mitigation Monitoring

Pursuant to COC CUL-6, either the CRS, alternate CRS, or CRM under the direct supervision of the CRS or alternate CRS will monitor full time during ground-disturbing activities to ensure that there are no impacts to previously undiscovered cultural resources unless the CPM determines that full-time monitoring is not necessary. Monitoring will be conducted by an archaeologist (approved as a CRM) with appropriate regional experience to ensure that both aboriginal and historic cultural materials are preserved. The CRS will determine whether prescriptive treatment may be applied to newly discovered cultural material, unless instructed by the CPM that prescriptive treatment is not appropriate. In the event that the CRS concludes that full-time monitoring is not necessary in certain locations, a letter providing a detailed justification for the decision to reduce the level of monitoring will be provided to the CPM for review and approval prior to any reduction in monitoring. Daily logs will be prepared by the CRM.

The CRS, alternate CRS, or CRM will be equipped with basic archaeological field equipment necessary to map discovered sites, photograph the finds, and begin recovery of cultural materials. A full suite of field gear needed to recover cultural materials will be brought onsite as required. If necessary, the CRS will make arrangements to cache frequently needed gear or supplies with the construction superintendent's field office.

9.0 Discovery Procedures and Discovery Protection

Pursuant to COC CUL-6, in the event that any cultural resources are found during construction, the archaeologist will have the authority to temporarily halt construction operations within a minimum of 33 feet (10 meters), or sufficient distance to protect the resource of a find or resource exposure. The CPM shall be notified of the discovery within 24 hours, along with the owner's project manager, appropriate city and/or county staff inspectors, or their designated representatives, as appropriate.

Construction will not resume at the discovery site until all of the following have occurred:

1. The specialist has notified the CPM of the find and the work stoppage
2. The CRS and the Project Owner have consulted with the CPM, and the CPM has concurred with the recommended eligibility of the discovery and proposed data recovery or other mitigation
3. Any needed data recovery and mitigation has been completed

All required data recovery and mitigation will be completed expeditiously unless all parties agree to additional time. The specialist, the project owner, and the CPM shall confer within five working days of the notification of the CPM to determine what, if any, data recovery or other mitigation is needed. This determination will be made as expeditiously as possible. If data recovery or other mitigation measures are required, the specialist and team members will monitor construction activities and implement data recovery and mitigation measures as needed. Significance is determined by the lead agency.

When a grave is inadvertently disturbed during construction, the remains must be treated with respect. If prehistoric skeletal remains are discovered during construction-related ground disturbance, state law will be followed.

10.0 Prescriptive Treatment

The prescriptive treatment described here applies to all areas of the project.

10.1.1 Treatment of Cultural Materials Considered Less Than 50 Years of Age

All of the materials listed below are less than 50 years of age and, unless of exceptional significance, will not be considered cultural resources that merit consideration for recordation or mitigation. If there is any doubt regarding the age of a historic-period find, the project owner and CRS will discuss this with the CPM when giving notice of the find. The following materials will not be reported unless exceptional:

- Plastic products limited to Styrofoam® and other foamed polystyrene products, Velcro®, Teflon® -coated cookware, polyvinylchloride (PVC) pipe, high-density polyethylene, polypropylene, polyimide, thermoplastic polyester, linear low density polyethylene, liquid crystal polymers, and products marked with resin codes
- Cans made from aluminum or bi-metal, or those with pull-tab or push-tab (metal or plastic) openings
- Aluminum foil containers
- Synthetic tires, car parts
- Modern electronics (CD players, VCRs, electronic appliances, personal electronics, computers, printers)
- Compact disks, floppy computer disks, magnetic tape media
- Unidentifiable metal fragments
- Rubberized metal
- Clothing or shoes made of plastic or synthetic materials

Monitors or other staff who are examining historic materials, especially plastic materials, should have sufficient familiarity to differentiate materials that are more than 50 years of age from more recent materials. Keep in mind that even though there is a perception that

plastics are all of recent production, many plastics were invented and produced in the late 19th and early 20th centuries.

Any materials less than 50 years old that are found with materials older than 50 years will be reported.

10.1.2 Prescribed Treatment of Archaeological Discoveries 50 Years of Age or Older

For some classes of resources, treatment (mitigation) under the CUL-6 discovery condition can be agreed upon before starting construction on the project. Defining the resource classes and treatments prior to starting project-related ground disturbance can limit delays in the construction schedule.

All cultural resources over 50 years of age will be recorded on DPR 523 forms, mapped, and photographed. Not all cultural resources over 50 years of age discovered during construction, however, are significant historical resources under the California Environmental Quality Act. Non-significant cultural resources, ineligible for nomination to the California Register of Historical Resources due to lack of integrity or information potential, may be treated prescriptively. The prescribed treatments for resources that are limited in value are listed below. Any resources not in this list cannot be so treated.

Prescribed treatment for the classes of resources over 50 years of age consists of the following:

- Construction is halted in the immediate vicinity of the find.
- The CRS/CRM records the find on a DPR 523A, including a location map and a photograph. Artifacts do not have to be collected or curated.
- The CRS or the Project Owner notifies the CPM of the find within 24 hours. The notification includes a description of the resource, a statement that it qualifies for prescribed treatment, and the information that the treatment has been completed.
- Construction can resume when the CPM acknowledges notification of the discovery and the required information has been collected.
- The CRS submits the required DPR 523A form completed for the find to the CPM as an attachment to the next Cultural Resources Monthly Compliance Report.

10.1.3 Classes of Prehistoric Archaeological Resources Eligible for Prescribed Treatment

- Small, sparse (less than three pieces per square meter) scatters of lithic debitage that lack depth (less than 10 centimeters). If the project area has low-density sites that have research potential, then such sites cannot be treated in accordance with this procedure.
- Sparse occurrences of fragments of fire-affected rock (less than three pieces per square meter, with no other cultural constituents).
- Sparse occurrences of fragments of baked or vitrified clay (less than three pieces per square meter, with no other cultural constituents). If baked clay effigies are found, the baked clay effigies and associated deposit will be evaluated for significance.
- Small midden remnants (smaller than 1 meter x 1 meter) that lack depth (less than 10 centimeters). If charcoal, bone, or other diagnostic elements are found in the midden, or the deposit is exceptional (greater than 3,000 years old) as determined from associated artifacts, the midden and associated diagnostic elements will be evaluated for significance.

- Small clusters (less than 1 meter x 1 meter in size) of unidentifiable shell (whole or fragmented). If artifacts, manuports or other materials are found, the shell and associated deposit will be evaluated for significance.
- Non-diagnostic isolated (spatially and temporally) prehistoric artifacts.

10.1.4 Classes of Historic-Period Archaeological Resources Eligible for Prescribed Treatment

- Roadside disposal of debris
- Small, isolated artifact concentrations (fewer than 20 artifacts or the fragments of fewer than three objects) with no potential for subsurface deposit
- Concrete, brick, or other building materials that lack structural integrity and are part of a documented disturbed (redeposited) context
- Metal, concrete, or ceramic pipes, conduits, or culverts that lack structural integrity
- Non-diagnostic isolated historic artifacts
- Any cultural resources deposits containing human remains cannot be treated prescriptively

11.0 Reports and Curation

Reports will follow contemporary professional archaeological standards and the general guidelines of the California Office of Historic Preservation. The designated specialist will prepare weekly summary reports on the progress or status of cultural-resources related activities that will be filed with the Project Owner for inclusion in the Monthly Compliance Report to the CPM. Interim, progress, and final reports will be issued as required and provided to the project manager. A copy of the CPM-approved confidential Final Cultural Resources Report will be provided to the CPM, under CUL-4.

Recovered specimens will be cleaned and reconstructed to the point of identification and, along with associated notes and reports, submitted to a qualified museum facility for curation. Following the filing of the CPM-approved Cultural Resources Report with the appropriate entities, the Project Owner will ensure that all cultural resource materials, maps, and data collected during data recovery and mitigation for the project are delivered to a public repository that meets the U.S. Secretary of the Interior requirements for the curation of cultural resources. The Project Owner will pay any fees for curation required by the repository under CUL-3.

Any artifacts collected will be curated at the San Bernardino County Museum, at 2024 Orange Tree Lane, Redlands, California (909-307-2669).

12.0 Native American Participation

Pursuant to COC CUL-6, provisions will be made for the participation of a Native American monitor during ground-disturbing activities if Native American artifacts are encountered during ground disturbance. The Native American monitor will act as a liaison between Native Americans and archaeologists, developers, contractors, and public agencies to ensure that cultural features are treated appropriately from the Native American point of view. This will help others involved in a project to coordinate mitigation measures. If human remains are discovered during the course of monitoring or mitigation activities, then the specific protocol, guidelines, and channels of communication outlined by the Native

American Heritage Commission (NAHC), and in accordance with Health and Safety Code Section 7050.5 and PRC Section 5097.98, apply. Section 7050.5(c) will guide the potential Native American involvement as follows:

If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she will contact by telephone within 24 hours the Native American Heritage Commission.

Under typical circumstances, the NAHC will then notify the Most Likely Descendent(s) (MLD) of the discovered remains. The MLD has 48 hours after being granted access to the construction site to make recommendations to the landowner or landowner's representative regarding treatment and disposition of the identified remains. The Project Owner will notify the CPM within 24 hours of the discovery, and of the recommendations made by the MLD and the proposed actions to mitigate the impact in accordance with CUL-6.

13.0 References

Carlsbad 2008 - Carlsbad Historical Society "Carlsbad Historic Points of Interest"
<<http://www.carlsbad.ca.us/historic.html>>, accessed on April 15, 2008.

CECP 2007a – Carlsbad Energy Center Project/Hemig (tn:42299). Application for Certification for the Carlsbad Energy Center Project, submitted to the California "Energy Commission Docket Unit on 9/11/2007.

Helton 2007 – Helton, Clint. Technical Memorandum: Carlsbad Energy Center Project (CECP); Cultural Resources Assessment. Prepared for Carlsbad Energy Center, LLC by CH2MHill.

Santa Fe 2008 –*Santa Fe Surviving Depots 2008*. "ATSF Carlsbad, CA Depot"
<<http://atsf.railfan.net/depots/carlsbad.html>>, accessed on April 15, 2008.

SR 2008q – Stoel Rives/K Hellwig (tn: 48690). Data responses, Set 3 (Responses to Cultural Resources Data Requests 126 through 131). 10/21/2008

Appendix A
Cultural Resources Conditions of Certification
(from the PMPD and Errata to PMPD)

that any direct, indirect, or cumulative adverse impacts to cultural resources resulting from project-related activities will be insignificant.

CONDITIONS OF CERTIFICATION

CUL-1 Prior to the start of ground disturbance,³ including tank removal and soil remediation, the project owner shall obtain the services of a Cultural Resources Specialist (CRS) and one or more alternates, if alternates are needed. The CRS shall manage all monitoring, mitigation, curation, and reporting activities required in accordance with the Conditions of Certification (Conditions). The CRS may elect to obtain the services of Cultural Resources Monitors (CRMs) and other technical specialists, if needed, to assist in monitoring, mitigation, and curation activities. The project owner shall ensure that the CRS makes recommendations regarding the eligibility for listing in the California Register of Historical Resources (CRHR) of any cultural resources that are newly discovered or that may be affected in an unanticipated manner (discovery). No ground disturbance, including tank removal and soil remediation, shall occur prior to CPM approval of the CRS, unless specifically approved by the CPM. Approval of a CRS may be denied or revoked for non-compliance on this project.

CULTURAL RESOURCES SPECIALIST

The resumes for the CRS and alternate(s) shall include information demonstrating to the satisfaction of the CPM that their training and backgrounds conform to the U.S. Secretary of Interior's Professional Qualifications Standards, as published in the Code of Federal Regulations, 36 CFR Part 61. In addition, the CRS shall have the following qualifications:

1. The CRS's qualifications shall be appropriate to the needs of the project and shall include a background in anthropology, archaeology, history, architectural history, or a related field; and
2. At least three years of archaeological or historic, as appropriate, resources mitigation and field experience in California.
3. At least one year of experience in a decision-making capacity on cultural resources projects in California and the appropriate training and experience to knowledgeably make recommendations regarding the significance of cultural resources.

³ "Ground disturbance" includes "preconstruction site mobilization"; "construction ground disturbance"; and "construction grading, boring and trenching," as defined in the General Conditions for this project.

The resumes of the CRS and alternate CRS shall include the names and telephone numbers of contacts familiar with the work of the CRS/alternate CRS on referenced projects and demonstrate to the satisfaction of the CPM that the CRS has the appropriate education and experience to accomplish the cultural resource tasks that must be addressed during ground disturbance, including tank removal and soil remediation.

CULTURAL RESOURCES MONITORS

CRMs shall have the following qualifications:

1. a BS or BA degree in anthropology, archaeology, historical archaeology or a related field and one year's experience monitoring in California; or
2. an AS or AA degree in anthropology, archaeology, historical archaeology, or a related field, and four years experience monitoring in California; or
3. enrollment in upper division classes pursuing a degree in the fields of anthropology, archaeology, historical archaeology, or a related field, and two years of monitoring experience in California.
4. CRMs assigned to monitor during tank removal and soil remediation shall hold an appropriate hazardous waste operations training certificate(s).

CULTURAL RESOURCES TECHNICAL SPECIALISTS

The resume(s) of any additional technical specialists, e.g., historical archaeologist, historian, architectural historian, and/or physical anthropologist, shall be submitted to the CPM for approval.

Verification:

1. At least 45 days prior to the start of ground disturbance, including tank removal and soil remediation, the project owner shall submit the resume for the CRS, and alternate(s) if desired, to the CPM for review and approval.
2. At least 10 days prior to a termination or release of the CRS, or within 10 days after the resignation of a CRS, the project owner shall submit the resume of the proposed new CRS to the CPM for review and approval. At the same time, the project owner shall also provide to the approved new CRS the AFC and all cultural documents, field notes, photographs, and other cultural materials generated by the project.
3. At least 20 days prior to ground disturbance, including tank removal and soil remediation, the CRS shall provide a letter naming anticipated CRMs for the

project and stating that the identified CRMs meet the minimum qualifications for cultural resources monitoring required by this Condition. CRMs possessing current hazardous waste operations certificates shall be identified. If additional CRMs are obtained during the project, the CRS shall provide additional letters to the CPM identifying the CRMs and attesting to the qualifications of the CRMs, at least five days prior to the CRMs beginning on-site duties.

4. At least 10 days prior to beginning tasks, the resume(s) of any additional technical specialists shall be provided to the CPM for review and approval.
5. At least 10 days prior to the start of ground disturbance, including tank removal and soil remediation, the project owner shall confirm in writing to the CPM that the approved CRS will be available for on-site work and is prepared to implement the Cultural Resources Conditions.

CUL-2 Prior to the start of ground disturbance, including tank removal and soil remediation, if the CRS has not previously worked on the project, the project owner shall provide the CRS with copies of the Application for Certification (AFC), data responses, and confidential cultural resources reports for the project. The project owner shall also provide the CRS and the CPM with maps and drawings showing the footprint of the power plant, all linear facilities, access roads and laydown areas. Maps shall include the appropriate U.S. Geological Survey quadrangles and a map at an appropriate scale (e.g., 1:2000 or 1 inch = 200 feet') for plotting cultural features or materials. If the CRS requests enlargements or strip maps for linear facility routes, the project owner shall provide copies to the CRS and CPM. The CPM shall review submittals and, in consultation with the CRS, approve those that are appropriate for use in cultural resources planning activities.

The CRS and CRM shall coordinate their oversight of ground disturbance with the Geotechnical Investigation required by the **Facility Design** Conditions of Certification.

No ground disturbance, including tank removal and soil remediation, shall occur prior to CPM approval of maps and drawings, unless specifically approved by the CPM.

If construction of the project should proceed in phases, maps and drawings not previously provided, shall be submitted prior to the start of each phase. Written notification identifying the proposed schedule of each project phase shall be provided to the CRS and CPM.

At a minimum, the CRS shall consult weekly with the project construction manager to confirm area(s) to be worked during the next week, until ground disturbance, including tank removal and soil remediation is completed.

The project owner shall notify the CRS and CPM of any changes to the scheduling of the construction phases.

Verification:

1. At least 40 days prior to the start of ground disturbance, including tank removal and soil remediation, the project owner shall provide the AFC, data responses, and confidential cultural resources documents to the CRS, if needed, and the subject maps and drawings to the CRS and CPM. The CPM will review submittals in consultation with the CRS and approve maps and drawings suitable for cultural resources planning activities.
2. If there are changes to any project-related footprint, revised maps and drawings shall be provided at least 15 days prior to start of ground disturbance, including tank removal and soil remediation, for those changes.
3. If project construction is phased, if not previously provided, the project owner shall submit the subject maps and drawings 15 days prior to each phase.
4. On a weekly basis during ground disturbance, including tank removal and soil remediation, a current schedule of anticipated project activity shall be provided to the CRS and CPM by letter, email, or fax.
5. Within 5 days of identifying changes, the project owner shall provide written notice of any changes to scheduling of construction phase.

CUL-3 Prior to the start of ground disturbance, including tank removal and soil remediation, the project owner shall submit the Cultural Resources Monitoring and Mitigation Plan (CRMMP), as prepared by or under the direction of the CRS, to the CPM for review and approval. The CRMMP shall be provided in the Archaeological Resource Management Report (ARMR) format, and, per ARMR guidelines, the author's name shall appear on the title page of the CRMMP. The CRMMP shall identify general and specific measures to minimize potential impacts to sensitive cultural resources. Implementation of the CRMMP shall be the responsibility of the CRS and the project owner. Copies of the CRMMP shall reside with the CRS, alternate CRS, each monitor, and the project owner's on-site construction manager. No ground disturbance, including tank removal and soil remediation, shall occur prior to CPM approval of the CRMMP, unless specifically approved by the CPM.

The CRMMP shall include, but not be limited to, the following elements and measures:

1. A general research design that includes a discussion of archaeological research questions and testable hypotheses specifically applicable to the project area, and a discussion of artifact collection, retention/disposal, and curation policies as related to the research questions formulated in the research design. A prescriptive treatment

plan may be included in the CRMMP for limited resource types. A refined research design will be prepared for any resource where data recovery is required.

2. The following statement included in the Introduction: “Any discussion, summary, or paraphrasing of the Conditions in this CRMMP is intended as general guidance and as an aid to the user in understanding the Conditions and their implementation. The Conditions, as written in the Commission Decision, shall supersede any summarization, description, or interpretation of the Conditions in the CRMMP. The Cultural Resources Conditions of Certification from the Commission Decision are contained in Appendix A.”
3. Identification of the person(s) expected to perform each of the tasks, his or her responsibilities, and the reporting relationships between project construction management and the mitigation and monitoring team.
4. A description of the manner in which Native American observers or monitors will be included, the procedures to be used to select them, their roles and responsibilities, and provisions to comply with NAHC Guidelines.
5. A statement that all cultural resources encountered shall be recorded on a Department of Parks and Recreation (DPR) form 523 and mapped and photographed. In addition, all archaeological materials retained as a result of the archaeological investigations (survey, testing, data recovery) shall be curated in accordance with the California State Historical Resources Commission's *Guidelines for the Curation of Archaeological Collections*, into a retrievable storage collection in a public repository or museum.
6. A statement that the project owner will pay all curation fees and a copy of an agreement with, or other written commitment from, a curation facility to accept artifacts from this project. Any agreements concerning curation will be retained and available for audit for the life of the project.
7. A statement that the CRS has access to equipment and supplies necessary for site mapping, photography, and recovery of any cultural resources materials that are encountered during construction and cannot be treated prescriptively.
8. A description of the contents and format of the Cultural Resources Report (CRR), which shall be prepared according to ARMR guidelines.

Verification:

1. At least 30 days prior to the start of ground disturbance, including tank removal and soil remediation, the project owner shall submit the subject CRMMP to the CPM for review and approval. Ground disturbance, including tank removal and soil remediation, may not commence until the CRMMP is approved, unless specifically approved by the CPM.
2. At least 30 days prior to the start of ground disturbance, including tank removal and soil remediation, a letter shall be provided to the CPM indicating that the project owner agrees to pay curation fees for any materials collected as a result of the archaeological investigations (survey, testing, data recovery).

CUL-4 The project owner shall submit the Cultural Resources Report (CRR) to the CPM for approval. The CRR shall be written by or under the direction of the CRS and shall be provided in the ARMIR format. The CRR shall report on all field activities including dates, times and locations, findings, samplings, and analyses. All survey reports, Department of Parks and Recreation (DPR) 523 forms, and additional research reports not previously submitted to the California Historical Resources Information System (CHRIS) and the State Historic Preservation Officer (SHPO) shall be included as an appendix to the CRR.

If the project owner requests a suspension of construction activities, then a draft CRR that covers all cultural resources activities associated with the project shall be prepared by the CRS and submitted to the CPM for review and approval on the same day as the suspension/extension request. The draft CRR shall be retained at the project site in a secure facility until construction resumes or the project is withdrawn. If the project is withdrawn, then a final CRR shall be submitted to the CPM for review and approval at the same time as the withdrawal request.

Verification:

1. Within 90 days after completion of ground disturbance (including landscaping), the project owner shall submit the CRR to the CPM for review and approval. If any reports have previously been sent to the CHRIS, then receipt letters from the CHRIS or other verification of receipt shall be included in an appendix.
2. Within 10 days after CPM approval, the project owner shall provide documentation to the CPM confirming that copies of the CRR have been provided to the SHPO, the CHRIS, and the curating institution, if archaeological materials were collected.
3. Within 30 days after requesting a suspension of construction activities, the project owner shall submit a draft CRR to the CPM for review and approval.

CUL-5 Prior to and for the duration of ground disturbance, including tank removal and soil remediation, the project owner shall provide Worker Environmental Awareness Program (WEAP) training to all new workers within their first week of employment. The training shall be prepared by the CRS, may be conducted by any member of the archaeological team, and may be presented in the form of a video. The CRS shall be available (by telephone or in person) to answer questions posed by employees. The training may be discontinued when ground disturbance, including tank removal and soil remediation, is completed or suspended, but shall be resumed when ground disturbance, such as landscaping, resumes. The training shall include:

1. A discussion of applicable laws and penalties under the law;
2. Samples or visuals of artifacts that might be found in the project vicinity;
3. Instruction that the CRS, alternate CRS, and CRMs have the authority to halt construction in the area of a discovery to an extent sufficient to ensure that the resource is protected from further impacts, as determined by the CRS;
4. Instruction that employees are to halt work on their own in the vicinity of a potential cultural resources discovery and shall contact their supervisor and the CRS or CRM, and that redirection of work would be determined by the construction supervisor and the CRS;
5. An informational brochure that identifies reporting procedures in the event of a discovery;
6. An acknowledgement form signed by each worker indicating that he/she has received the training; and
7. A sticker that shall be placed on hard hats indicating that environmental training has been completed.

No ground disturbance, including tank removal and soil remediation, shall occur prior to implementation of the WEAP program, unless specifically approved by the CPM.

Verification:

At least 30 days prior to the beginning of ground disturbance, including tank removal and soil remediation, the CRS shall provide the training program draft text and graphics and the informational brochure to the CPM for review and approval, and the CPM will provide to the project owner a WEAP Training Acknowledgement form for each WEAP-trained worker to sign.

On a monthly basis, the project owner shall provide in the Monthly Compliance Report (MCR) the WEAP Training Acknowledgement forms of persons who have completed the training in the prior month and a running total of all persons who have completed training to date.

CUL-6 The project owner shall ensure that the CRS, alternate CRS, or CRMs shall monitor ground disturbance, including tank removal and soil remediation, full time at the project site and linear facilities, and ground disturbance full time at laydown areas or other ancillary areas, to ensure there are no impacts to undiscovered resources and to ensure that known resources are not impacted in an unanticipated manner (discovery). Specifically, the CRS, alternate CRS, or CRMs shall monitor the ground disturbance, including tank removal and soil remediation that reaches to within 3 feet of native soil below the fill and all ground disturbances, including tank removal and soil remediation, in native soil. Whether or not archaeological monitoring is being conducted at project locations, twice daily, in the morning and afternoon, an archaeological monitor shall examine locations where machinery is disturbing fill soil to determine whether native soils might be disturbed. If disturbance is within 3 feet of native soil, full-time monitoring shall commence.

Full-time archaeological monitoring for this project shall be the archaeological monitoring of all earth-moving activities on the project site and laydown areas, including tank removal and soil remediation, for as long as the activities are ongoing. Full-time archaeological monitoring shall require at least one monitor per excavation area where machines may disturb native soils. If an excavation area is too large for one monitor to effectively observe the soil removal, one or more additional monitors shall be retained to observe the area.

If future geotechnical core borings are conducted for the project, they shall be monitored and the boring cores examined by a geoarchaeologist or qualified archaeologist for the presence of cultural material. If cultural material is identified, that information shall be reported to the CPM within 24 hours. Whether or not cultural material is identified, the results of the core examinations shall be provided in a report to the CPM.

In the event that the CRS determines that the current level of monitoring is not appropriate in certain locations, a letter or e-mail detailing the justification for changing the level of monitoring shall be provided to the CPM for review and approval prior to any change in the level of monitoring.

The research design in the CRMMP shall govern the collection, treatment, retention/disposal, and curation of any archaeological materials encountered.

On forms provided by the CPM, CRMs shall keep a daily log of any monitoring and other cultural resources activities and any instances of non-compliance with the Conditions and/or applicable LORS. From these logs, the CRS shall compile a monthly monitoring summary report to be included in the Monthly Compliance Report (MCR). If there are no monitoring

activities, the summary report shall specify why monitoring has been suspended.

The CRS, at his or her discretion, or at the request of the CPM, may informally discuss cultural resources monitoring and mitigation activities with Energy Commission technical staff.

Cultural resources monitoring activities are the responsibility of the CRS. Any interference with monitoring activities, removal of a monitor from duties assigned by the CRS, or direction to a monitor to relocate monitoring activities by anyone other than the CRS shall be considered non-compliance with these Conditions.

Upon becoming aware of any incidents of non-compliance with the Conditions and/or applicable LORS, the CRS and/or the project owner shall notify the CPM by telephone or e-mail within 24 hours. The CRS shall also recommend corrective action to resolve the problem or achieve compliance with the Conditions. When the issue is resolved, the CRS shall write a report describing the issue, the resolution of the issue, and the effectiveness of the resolution measures. This report shall be provided in the next MCR for the review of the CPM.

A Native American monitor shall be obtained to monitor ground disturbance, including tank removal and soil remediation, in areas where excavations may extend into native soil. Informational lists of concerned Native Americans and guidelines for monitoring shall be obtained from the Native American Heritage Commission. Preference in selecting a monitor shall be given to Native Americans with traditional ties to the area that shall be monitored. If efforts to obtain the services of a qualified Native American monitor are unsuccessful, the project owner shall immediately inform the CPM. The CPM will either identify potential monitors or will allow ground disturbance, including tank removal and soil remediation to proceed without a Native American monitor.

Verification:

At least 30 days prior to the start of ground disturbance, including tank removal and soil remediation, the CPM will provide to the CRS an electronic copy of a form to be used as a daily monitoring log. While monitoring is ongoing, the project owner shall include in each MCR a copy of the monthly summary report of cultural resources-related monitoring prepared by the CRS.

Daily, the CRS shall provide a statement that “no cultural resources more than 50 years of age were discovered” to the CPM as an e-mail or in some other form acceptable to the CPM. The statement shall also include information based on the twice daily observations of soils by the archaeological monitor and indicate the likelihood of disturbing native soils. If the CRS concludes that daily reporting is no longer necessary, a letter or e-mail providing a detailed justification for the decision to reduce or end daily reporting shall be provided to the CPM for review

and approval at least 24 hours prior to reducing or ending daily reporting. At least 24 hours prior to implementing a proposed change in monitoring level, documentation justifying the change shall be submitted to the CPM for review and approval.

At least 24 hours prior to implementing a proposed change in monitoring level, documentation justifying the change shall be submitted to the CPM for review and approval.

If geotechnical core borings are conducted and cultural material is identified by a geoarchaeologist or archaeologist, the CPM shall be notified within 24 hours. Within 30 days after the examination of the core borings is completed, the CRS shall provide a copy of the results of the core examinations in a report to the CPM.

CUL-7 The project owner shall grant authority to halt construction to the CRS, alternate CRS, and the CRMs in the event of a discovery. Redirection of ground disturbance, including tank removal and soil remediation, shall be accomplished under the direction of the construction supervisor in consultation with the CRS.

In the event cultural resources more than 50 years of age or considered exceptionally significant are found, or impacts to such resources can be anticipated, construction shall be halted or redirected in the immediate vicinity of the Discovery sufficient to ensure that the resource is protected from further impacts. The halting or redirection of construction shall remain in effect until the CRS has visited the Discovery, and all of the following have occurred:

1. the CRS has notified the project owner, and the CPM has been notified within 24 hours of the discovery, or by Monday morning if the cultural resources discovery occurs between 8:00 a.m. on Friday and 8:00 a.m. on Sunday morning, including a description of the discovery (or changes in character or attributes), the action taken (i.e. work stoppage or redirection), a recommendation of eligibility, and recommendations for mitigation of any cultural resources discoveries, whether or not a determination of significance has been made.
2. the CRS has completed field notes, measurements, and photography for a DPR 523 primary form. The "Description" entry of the 523 form shall include a recommendation on the significance of the find. The project owner shall submit completed forms to the CPM.
3. The CRS, the project owner, and the CPM have conferred, and the CPM has concurred with the recommended eligibility of the discovery and approved the CRS's proposed data recovery, if any, including the

curation of the artifacts, or other appropriate mitigation; and any necessary data recovery and mitigation have been completed.

Verification:

1. At least 30 days prior to the start of ground disturbance, including tank removal and soil remediation, the project owner shall provide the CPM and CRS with a letter confirming that the CRS, alternate CRS, and CRMs have the authority to halt construction activities in the vicinity of a cultural resources discovery, and that the project owner shall ensure that the CRS notifies the CPM within 24 hours of a discovery, or by Monday morning if the cultural resources discovery occurs between 8:00 a.m. on Friday and 8:00 a.m. on Sunday morning.
2. Completed DPR form 523s shall be submitted to the CPM for review and approval no later than 24 hours following the notification of the CPM, or 48 hours following the completion of data recordation/recovery, whichever is more appropriate for the subject cultural resource, as determined by the CRS.

CUL- 8 If fill soils must be acquired from a non-commercial borrow site or disposed of to a non-commercial disposal site, unless less-than-five-year-old surveys of these sites for archaeological resources are documented to and approved by the CPM, the CRS shall survey the borrow and/or disposal site(s) for cultural resources and record on DPR 523 forms any that are identified. When the survey is completed, the CRS shall convey the results and recommendations for further action to the project owner and the CPM, who will determine what, if any, further action is required. If the CPM determines that significant archaeological resources that cannot be avoided are present at the borrow site, all these conditions of certification shall apply. The CRS shall report on the methods and results of these surveys in the CRR.

Verification: As soon as the project owner knows that a non-commercial borrow site and/or disposal site will be used, he/she shall notify the CRS and CPM and provide documentation of previous archaeological survey, if any, dating within the past five years, for CPM approval.

In the absence of documentation of recent archaeological survey, **at least 30 days prior** to any soil borrow or disposal activities on the non-commercial borrow and/or disposal sites, the CRS shall survey the site/s for archaeological resources. The CRS shall notify the project owner and the CPM of the results of the cultural resources survey, with recommendations, if any, for further action.

Health and all water reuse requirements issued by the San Diego Regional Water Quality Control Board.

CULTURAL RESOURCES

42. Cultural Resources, p. 5, delete last partial paragraph:

~~Impacts to cultural resources could also occur during project operation if the gas or water pipeline requires repair via excavation that could uncover previously unknown subsurface archaeological resources. Commission staff appears to recommend that the mitigation measures described in Conditions CUL-1 through CUL-8 apply under any circumstances when project-related ground disturbance is necessary. We find nothing in the proposed conditions to that effect, however, and a simple statement here in the narrative portion of our decision is likely to be overlooked. Further, it may not be appropriate to apply all of the conditions—the worker awareness training, for example—to a discrete project conducted by a subset of the operations employees or a contractor conducting the specialized excavation work. We therefore invite the parties, especially the staff, to propose an additional condition specifying the measures that should apply to post-construction activities. (Exs 4, § 5.3.6; 200, p. 4.3-17, et seq.)~~

43. Cultural Resources Condition CUL-1, p. 9, first paragraph, revise as follows, retaining the remainder of the Condition:

The resumes of the CRS and alternate CRS shall include the names and telephone numbers of contacts familiar with the work of the CRS/alternate CRS on referenced projects and demonstrate to the satisfaction of the CPM that the CRS has the appropriate education and experience to accomplish the cultural resource tasks that must be addressed during ground disturbance, including tank removal and soil remediation. **After all ground disturbance is completed and the CRS has fulfilled all responsibilities specified in these cultural resources conditions, the project owner may discharge the CRS, if the CPM approves. With the discharge of the CRS, these cultural resources conditions no longer apply to the activities of this power plant.**

44. Cultural Resources Condition CUL-6, p. 15, revise as follows:

CUL-6 The project owner shall ensure that the CRS, alternate CRS, or CRMs monitor full time all ground disturbance of native soils at the project site, along linear facilities and roads, and at parking and other ancillary areas, including wetlands mitigation areas, to ensure there are no impacts to undiscovered resources and to ensure that known resources are not impacted in an unanticipated manner.

~~The project owner shall ensure that the CRS, alternate CRS, or CRMs shall monitor ground disturbance, including tank removal and soil remediation, full~~

~~time at the project site and linear facilities, and ground disturbance full time at laydown areas or other ancillary areas, to ensure there are no impacts to undiscovered resources and to ensure that known resources are not impacted in an unanticipated manner (discovery). Specifically, the CRS, alternate CRS, or CRMs shall monitor the ground disturbance, including tank removal and soil remediation that reaches to within 3 feet of native soil below the fill and all ground disturbances, including tank removal and soil remediation, in native soil. Whether or not archaeological monitoring is being conducted at project locations, twice daily, in the morning and afternoon, an archaeological monitor shall examine locations where machinery is disturbing fill soil to determine whether native soils might be disturbed. If disturbance is within 3 feet of native soil, full-time monitoring shall commence.~~

Full-time archaeological monitoring for this project shall be the archaeological monitoring of all earth-moving activities on the project site and laydown areas, including tank removal and soil remediation, for as long as the activities are ongoing. Full-time archaeological monitoring shall require at least one monitor ~~per excavation area~~ where machines **are actively disturbing** may disturb native soils. If an excavation area **or areas are** is too large for one monitor to effectively observe the soil removal, one or more additional monitors shall be retained to observe the area.

In the event that the CRS believes that the current level of monitoring is not appropriate in certain locations, a letter or e-mail detailing the justification for changing the level of monitoring shall be provided to the CPM for review and approval prior to any change in the level of monitoring.

If future geotechnical core borings are conducted for the project, they shall be monitored and the boring cores examined by a geoarchaeologist or qualified archaeologist for the presence of cultural material. If cultural material is identified, that information shall be reported to the CPM within 24 hours. Whether or not cultural material is identified, the results of the core examinations shall be provided in a report to the CPM.

In the event that the CRS determines that the current level of monitoring is not appropriate in certain locations, a letter or e-mail detailing the justification for changing the level of monitoring shall be provided to the CPM for review and approval prior to any change in the level of monitoring.

The research design in the CRMMP shall govern the collection, treatment, retention/disposal, and curation of any archaeological materials encountered.

On forms provided by the CPM, CRMs shall keep a daily log of any monitoring and other cultural resources activities and any instances of non-compliance with the Conditions and/or applicable LORS. From these logs, the CRS shall compile a monthly monitoring summary report to be included in the

Monthly Compliance Report (MCR). If there are no monitoring activities, the summary report shall specify why monitoring has been suspended.

The CRS, at his or her discretion, or at the request of the CPM, may informally discuss cultural resources monitoring and mitigation activities with Energy Commission technical staff.

Cultural resources monitoring activities are the responsibility of the CRS. Any interference with monitoring activities, removal of a monitor from duties assigned by the CRS, or direction to a monitor to relocate monitoring activities by anyone other than the CRS shall be considered non-compliance with these Conditions.

Upon becoming aware of any incidents of non-compliance with the Conditions and/or applicable LORS, the CRS and/or the project owner shall notify the CPM by telephone or e-mail within 24 hours. The CRS shall also recommend corrective action to resolve the problem or achieve compliance with the Conditions. When the issue is resolved, the CRS shall write a report describing the issue, the resolution of the issue, and the effectiveness of the resolution measures. This report shall be provided in the next MCR for the review of the CPM.

The project owner shall obtain a Native American monitor to monitor ground disturbance in any areas where Native American artifacts are discovered in native soils. ~~A Native American monitor shall be obtained to monitor ground disturbance, including tank removal and soil remediation, in areas where excavations may extend into native soil. Informational lists of concerned Native Americans and guidelines for monitoring shall be obtained from the Native American Heritage Commission. Preference in selecting a monitor shall be given to Native Americans with traditional ties to the area that shall be monitored. If efforts to obtain the services of a qualified Native American monitor are unsuccessful, the project owner shall immediately inform the CPM. The CPM will either identify potential monitors or will allow ground disturbance, including tank removal and soil remediation to proceed without a Native American monitor.~~

Verification: At least 30 days prior to the start of ground disturbance, including tank removal and soil remediation, the CPM will provide to the CRS an electronic copy of a form to be used as a daily monitoring log. While monitoring is ongoing, the project owner shall include in each MCR a copy of the monthly summary report of cultural resources-related monitoring prepared by the CRS.

Daily, the CRS shall provide a statement that “no cultural resources more than 50 years of age were discovered” to the CPM as an e-mail or in some other form acceptable to the CPM. The statement shall also include information based on the twice daily observations of soils by the archaeological monitor and indicate the likelihood of disturbing native soils. If the CRS concludes that daily reporting is no longer necessary, a letter or e-mail providing a detailed justification for the decision to reduce or end daily

reporting shall be provided to the CPM for review and approval at least 24 hours prior to reducing or ending daily reporting. At least 24 hours prior to implementing a proposed change in monitoring level, documentation justifying the change shall be submitted to the CPM for review and approval.

At least 24 hours prior to implementing a proposed change in monitoring level, documentation justifying the change shall be submitted to the CPM for review and approval.

If geotechnical core borings are conducted and cultural material is identified by a geoarchaeologist or archaeologist, the CPM shall be notified within 24 hours. Within 30 days after the examination of the core borings is completed, the CRS shall provide a copy of the results of the core examinations in a report to the CPM.

GEOLOGICAL AND PALEONTOLOGICAL RESOURCES

45. Geo/Paleo, p. 8, Conditions 10 – 16, revise and renumber as follows:

10. The evidence **indicates** ~~assumes~~ that liquefaction, lateral spreading, dynamic compaction, hydrocompaction, landslides, flooding, tsunamis, and seiches pose low or negligible project risks but this assumption must be confirmed by the site-specific geotechnical investigation referenced above in Findings #7, #8, and #9.

11. Project construction will conform to the most recently adopted version of the California Building Code, including its seismic requirements for the project locality, based on the results of the required geotechnical investigation.

12. Geologic hazards to the project, including those from seismic events, would be low, but must be addressed in the geotechnical report provided consistent with the most recently adopted version of the California Building Code.

13. Compliance with the seismic requirements of the California Building Code effectively mitigates the danger to project structures from seismic ground shaking.

14~~14~~. There is no evidence of existing or potential geologic or mineralogic resources at the project site or along the linear alignments.

15~~14~~. Although many paleontologic sites are documented within three miles of the site, there are no records documenting paleontologic finds on the CECF site or along the project's linear alignments.

16~~14~~. Since the ground surface at the site is disturbed, the surface fill material is unlikely to contain significant paleontologic resources within their natural context and is assigned a zero paleontologic sensitivity rating.

Appendix B
WEAP Sign-off Record

Certification of Completion of Cultural Resources Education Program

Carlsbad Energy Center Project
Cultural Resources Education Program Verification
All On-Site Employees

This is to certify the below-mentioned individuals have completed a mandatory California Energy Commission-approved Cultural Resources Education (Environmental Awareness) Program for Employees on site at the Carlsbad Energy Center Project. By signing below, the participants indicate that they understand and shall abide by the guidelines set forth in the Program materials.

No.	Employee Name	Company	Signature	Date
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Trainer: _____ Signature: _____ Date: ____/____/____

Appendix C

Resumes for Cultural Resources Specialist

Designated Cultural Resources Specialist:
Clint Helton

Clint Helton, M.A., RPA

Senior Cultural Resources Specialist

Education

MA, Anthropology, Brigham Young University
BA, Language and Literature, University of Utah

Years of Experience: 14

Professional Registrations

- Registered Professional Archaeologist (No. 11280)
- Holds Multiple Federal Antiquities Permits: CA, NV, OR, UT, WA
- Meets Secretary of Interior Professional Qualification Standards (36CFR61)
- Approved as a Designated Cultural Resources Specialist by California Energy Commission for Construction Compliance work

Distinguishing Qualifications

- Strong background in environmental impact evaluations, with particular expertise in conducting cultural resources studies in California, Colorado, Idaho, Nevada, Utah, and Wyoming
- Has 14 years of environmental management experience in the western U.S.
- Meets Secretary of Interior Professional Qualification Standards (36 CFR 61)
- Highly experienced managing cultural resources studies for large energy, linear transportation and utility projects to meet requirements of National Environmental Policy Act (NEPA), National Historic Preservation Act (NHPA), California Environmental Quality Act (CEQA), and standards of the California Energy Commission (CEC), and Federal Energy Regulatory Commission (FERC)

Relevant Experience

Mr. Helton has more than 14 years of environmental management experience in the United States. He has a strong background in environmental impact evaluations, having directed technical studies; negotiated with lead agencies, responsible agencies and clients; and has written, edited, and produced a substantial number of environmental review and technical documents. His knowledge of regulatory compliance and cultural and paleontological resources enables him to manage National Environmental Policy Act (NEPA) and National Historic Preservation Act (NHPA) compliance activities and document preparation. Mr. Helton is a particularly skilled practitioner of federal regulations governing treatment of cultural resources, especially Section 106 of NHPA (36CFR800) and the Native American Graves Protection and Repatriation Act (NAGPRA) (43CFR10). Mr. Helton has significant expertise conducting consultation with State and Federal agencies, as well as facilitating formal government-to-government consultation with Native American groups and tribes throughout the western U.S. Additionally, Mr. Helton has authored numerous environmental technical reports, cultural resources management plans, cultural resources studies, Programmatic Agreements, Memorandums of Understanding (MOU), and contributed to many NEPA documents for a variety of private and public sector clients. Mr. Helton is native-level bilingual in Spanish.

Clint Helton, M.A., RPA

Representative Projects

California Energy Commission Approved Cultural Resources Specialist, Multiple Power Generation Projects, California. Conduct literature reviews, records searches, and field surveys to develop Cultural Resources Assessments, prepare cultural resources impact evaluations and mitigation measures for projects' Application for Certification before the California Energy Commission. Determine cultural resources sensitivity and history of the project areas, direct field surveys, and prepare resource specific documentation for more than 20 separate projects throughout California. Prepare Cultural Resources Monitoring and Mitigation Plans for construction-phase compliance activities.

Cultural Resources Specialist, Construction-Phase Mitigation Implementation, Multiple Power Generation Projects, California. Develop and manage cultural resources monitoring and mitigation programs for the construction of power generation projects throughout California. Prepare the Cultural Resources Module of the worker education program and visual aids for worker education. Direct the recovery of discovered cultural resources (historic and prehistoric) and consult with client representatives and the California Energy Commission on the adequacy of mitigation efforts. Develop site-specific data recovery plans, and to provide client and the California Energy Commission with guidance regarding what construction activities need and need not be monitored. Responsible for preparation of daily and monthly reports, and a final monitoring report.

Edison Mission Energy, Walnut Creek Energy Park, Los Angeles County, California. Assisted with preparation of Application for Certification for California Energy Commission in support of this proposed 500 MW power generation facility in Los Angeles County, California. Responsible for preparation of cultural resources component of project, including field surveys, report preparation, and conducting Native American consultation.

City of Vernon Power Plant, Los Angeles County, California. Assisted with preparation of Application for Certification for California Energy Commission in support of this proposed 800 MW power generation facility in Los Angeles County, California. Responsible for preparation of cultural resources component of project, including field surveys, report preparation, and conducting Native American consultation.

Russell City Energy Center, Calpine, Alameda County, California. Cultural Resources Specialist for the AFC license amendment for a 600-MW power plant. Prepared cultural resources analysis including archival research, field survey, and report preparation. Approved as Designated Cultural Resources Specialist during construction phase of project.

Mariposa Energy Project, Alameda County, California. Task Lead and overall management of cultural resources studies for the construction of a simple-cycle generating facility with a nominal capacity of 200-megawatts. Responsible for preparation of cultural resources component of project, including field surveys, report preparation, and conducting Native American consultation. Approved as Designated Cultural Resources Specialist during construction phase of project.

Turlock Irrigation District Almond 2 Power Plant, Stanislaus County, California. Task Lead and overall management of cultural resources studies for the construction of a simple-cycle peaking

Clint Helton, M.A., RPA

facility rated at a gross generating capacity of 174 megawatts. Responsible for preparation of cultural resources component of project, including field surveys, report preparation, and conducting Native American consultation. Approved as Designated Cultural Resources Specialist during construction phase of project.

Humboldt Bay Repowering Project, Humboldt County, California. Task Lead and CEC approved Designated Cultural Resources Specialist during construction of the Humboldt Bay Repowering Project (HBRP). The project consisted of construction of a load-following power plant consisting of ten natural-gas fired reciprocating engine-generator sets and associated equipment with a combined nominal generating capacity of 163 MW. The project repowers the existing 105 MW Humboldt Bay Power Plant Units 1 and 2. Responsible for ensuring implementation of the cultural resources Conditions of Certification (COCs) and Cultural Resources Monitoring and Mitigation Plan (CRMMP), directly supervising on-site construction monitors, reporting to the CEC's CPM and Cultural Resources Staff, and response to cultural resources discoveries during construction. Prepared Worker Environmental Awareness Program (WEAP) training material and ensured that compliance monitors, contractors, and construction crews met the requirements described in the projects COCs. Prepared daily and monthly reports, and a final monitoring report.

Lodi Energy Center, NCPA, San Joaquin County, California. Cultural Resources Task Lead for the licensing of this 255-MW combined cycle power plant. Prepared cultural resources analysis including archival research, field survey, and report preparation. Approved as Designated Cultural Resources Specialist during construction phase of project.

Project Manager; Sacramento Municipal Utility District (SMUD) Cosumnes Power Plant and Gas Pipeline Project, Environmental Compliance, Sacramento, California. Managed interdisciplinary team of over 20 environmental specialists including archaeologists, biologists, and paleontologists during construction of 26-mile gas pipeline and associated power generation plant. Contract value was over \$2.0 million.

Cultural Resources Specialist, Ivanpah Solar Electric Generating System Project, San Bernardino County, California. Assisted with preparation of Application for Certification for California Energy Commission in support of a large proposed solar power generation facility covering over 4,000 acres of land managed by Bureau of Land Management in San Bernardino County, California. Responsible for preparation of cultural resources component of project, including archival research, field surveys, report preparation, and conducting Native American consultation. Also approved as the Designated Cultural Resources Specialist to lead construction monitoring and oversee all response to any eventual cultural resources discoveries.

Additional Third-Party Environmental Compliance/Mitigation Monitoring Experience Supporting Major Construction Projects:

Project Manager, Cosumnes Power Plant and Gas Pipeline Project, SMUD
Project Manager, Level III Fiber Optic Project, Level III Communications
Project Principal/QC Manager, Talega Housing Development, Talega Associates
Project Manager, Silver State East Fiber Optic Project, Sierra Pacific Power Company
Project Manager, I-80 Fiber Optic Project, Williams Communications
Project Manager, Questar Mainline 104 pipeline loop, Questar Pipeline Company

Clint Helton, M.A., RPA

Names and telephone numbers of contacts familiar with the work of the CRS on referenced projects:

Beverly Bastian California Energy Commission Biological/Cultural Resources Unit (916) 654-4840	Dena Parish PG&E, HBGS Office (707) 444-6568 Cell (707) 267-8674
Allison Bryan Calpine, RCEC (925) 890-1051	Tracie Wheaton Brightsource Energy, ISEGS (702) 768-7188

Appendix D
Daily Monitoring Log

Cultural Resources Daily Monitoring Log

_____ Project, Date: _____, Monitor Name: _____

Weather Conditions: _____

Hours on Site Not Worked and Reason: _____

Work Location (Project Component): _____

Work Type (Machine): _____

Depth of Excavation: _____

Observed Native Soils (Stratigraphy): _____

Disturbed/Redeposited Soils: _____

Features: _____

Artifacts (Isolated? Diagnostic? Older than 45 years? Exceptional? Include description, provenience, stratigraphic context.):

Recommendation of Significance of Any Finds?

Actions Taken (Halt/Resume Construction; Identification; Notifications; Recommendations; Photography; Collecting; Sampling), Other Observations:

Appendix E

Curation Agreement



SAN BERNARDINO COUNTY MUSEUM

2024 Orange Tree Lane • Redlands, California USA 92374-4560
(909) 307-2669 • Fax (909) 307-0539 • www.sbcountymuseum.org
TDD (909) 792-1462



COUNTY OF SAN BERNARDINO
PUBLIC AND SUPPORT
SERVICES GROUP

ROBERT L. McKERNAN
Director

Clint Helton, Principal Investigator
CH2M HILL
6 Hutton Centre Drive, Suite 700
Santa Ana, CA 92707

July 28, 2010

RE: Curation Agreement for Survey, Testing, and Data Recovery

Dear Mr. Helton,

The San Bernardino County Museum is a federally recognized and approved curation facility. The San Bernardino County Museum will accept for storage historic and prehistoric collections and records from archaeological sites in Southern California. Collections from areas adjacent to Southern California will be accepted if they fall within the scope of a single project and should be housed with the Southern California collections to maintain the integrity of the data. A fee of \$1000.00 per box (10" x 12" x 15") for storage of archaeological collections and/or documents has been established by the San Bernardino County Board of Supervisors. Note that we do not accept partial boxes for charging fees; partial boxes are charged for the whole fee (\$1000.00/box).

We would be delighted to assist in the curation of artifacts/records for projects associated with survey, testing, and/or data recovery on lands held by the BLM. Please make sure if you collect any artifacts, you include complete documentation. Documentation should consist of field notes, catalog, data analysis, and associated technical and environmental reports.

The scope of services provided by the San Bernardino County Museum consists of maintaining a storage and retrieval system and the preservation of collections in such form and manner that the objects will be available for research by the public. A hard copy of all reports, catalogues, site records, site maps and field notes must accompany the collection plus a copy of the catalogue on a PC compatible disk clearly labeled with the names of the files and the name of the software used.

It should be understood that since the Division of Anthropology, San Bernardino County Museum, is ultimately responsible and accountable for the curation of the collection and the supporting documentation, all laboratory and curation methods and materials must conform to the standards as set forth by the Smithsonian Institution.

If you have any further questions or need clarification on any points, please do not hesitate to call the museum. Before cataloging a collection, please call or e-mail (aschroth@sbcm.sbcounty.gov) for a SBCM curation number; this is different from the trinomial that the state assigns archaeology sites. We curate by the project, not the site number.

Sincerely,

Adella Schroth, Ph.D.
Curator of Anthropology